

Amendments to the Claims

Please cancel claims 19-40 without prejudice. Please add new claims 41-60 as shown below in the Listing of Claims.

Listing of Claims

1-40. (Cancelled)

41. (New) A high-transparency plastic material comprising:
 - a) a plastic matrix; and
 - b) discrete laser-absorbing particles consisting of nanoscale laser-sensitive metal oxides and/or nanoscale laser-sensitive doped metal oxides, wherein said discrete laser-absorbing particles constitute 0.0001 to 0.01 weight-percent of said plastic material and have a particle size of 1 to 500 nm;
and wherein said plastic material is laser-markable or laser-weldable.
42. (New) The plastic material of claim 41, wherein said discrete laser-absorbing particles are metal oxides.
43. (New) The plastic material of claim 42, wherein the size of said particles is 5 to 100 nm and said discrete laser-absorbing particles constitute 0.001 to 0.01 weight-percent of said plastic material.
44. (New) The plastic material of claim 42, wherein said plastic matrix comprises one or more materials selected from the group consisting of: poly(meth)acrylate; polyamide; polyurethane; polyolefins; styrene polymers and styrene copolymers; polycarbonate; silicones; polyimides; polysulfone; polyethersulfone; polyketones; polyetherketones; polyphenylensulfide; polyester; polyethylenoxide; polyurethane; polyolefins; and fluorine-containing polymers.
45. (New) The plastic material of claim 42, wherein said plastic matrix comprises polymethyl methacrylate.

46. (New) The plastic material of claim 42, wherein said plastic matrix comprises bisphenol-A-polycarbonate.
47. (New) The plastic material of claim 42, wherein said plastic matrix comprises polyamide.
48. (New) The plastic material of claim 41, wherein said discrete laser-absorbing particles are doped metal oxides.
49. (New) The plastic material of claim 48, wherein said particle size is 5 to 100 nm.
50. (New) The plastic material of claim 48, wherein said metal oxide is selected from the group consisting of: doped indium oxide; doped tin oxide; and doped antimony oxide.
51. (New) The plastic material of claim 48, wherein said metal oxide is indium-tin oxide or antimony-tin oxide.
52. (New) The plastic material of claim 51, wherein said metal oxide is blue indium-tin oxide.
53. (New) The plastic material of claim 48, wherein said plastic matrix comprises one or more materials selected from the group consisting of: poly(meth)acrylate; polyamide; polyurethane; polyolefins; styrene polymers and styrene copolymers; polycarbonate; silicones; polyimides; polysulfone; polyethersulfone; polyketones; polyetherketones; polyphenylensulfide; polyester; polyethylenoxide; polyurethane; polyolefins; and fluorine-containing polymers.
54. (New) The plastic material of claim 48, wherein said plastic matrix comprises polymethyl methacrylate.
55. (New) The plastic material of claim 48, wherein said plastic matrix comprises bisphenol-A-polycarbonate.

56. (New) The plastic material of claim 48, wherein said plastic matrix comprises polyamide.
57. (New) The plastic material of claim 41, wherein said plastic material is in the form of a molded body, semifinished product, molding compound, or lacquer and comprises a laser inscribed image.
58. (New) A method for producing a high-transparency laser-markable and/or laser-weldable plastic material comprising a plastic matrix and discrete laser-absorbing particles consisting of nanoscale laser-sensitive metal oxides and/or nanoscale laser-sensitive doped metal oxides, wherein said discrete laser-absorbing particles constitute 0.0001-0.01 weight percent of said high-transparency laser-markable and/or laser-weldable plastic material and have a particle size of 1 to 500 nm, said method comprising mixing said nanoscale laser-sensitive metal oxides and/or said nanoscale laser-sensitive doped metal oxides with a plastic matrix under conditions of high shear.
59. (New) A method for welding plastic molded bodies or plastic semifinished products, wherein at least one of the parts to be joined comprises a plastic material according to claim 41, at least in the surface area, said method comprising irradiating a join face of said plastic molded bodies or plastic semifinished products with laser light to which the metal oxide and/or doped metal contained in said plastic material is sensitive.
60. (New) The plastic material of claim 59, wherein said plastic material is in the form of a molded body, semifinished product, molding compound, or lacquer and comprises a laser inscribed image.